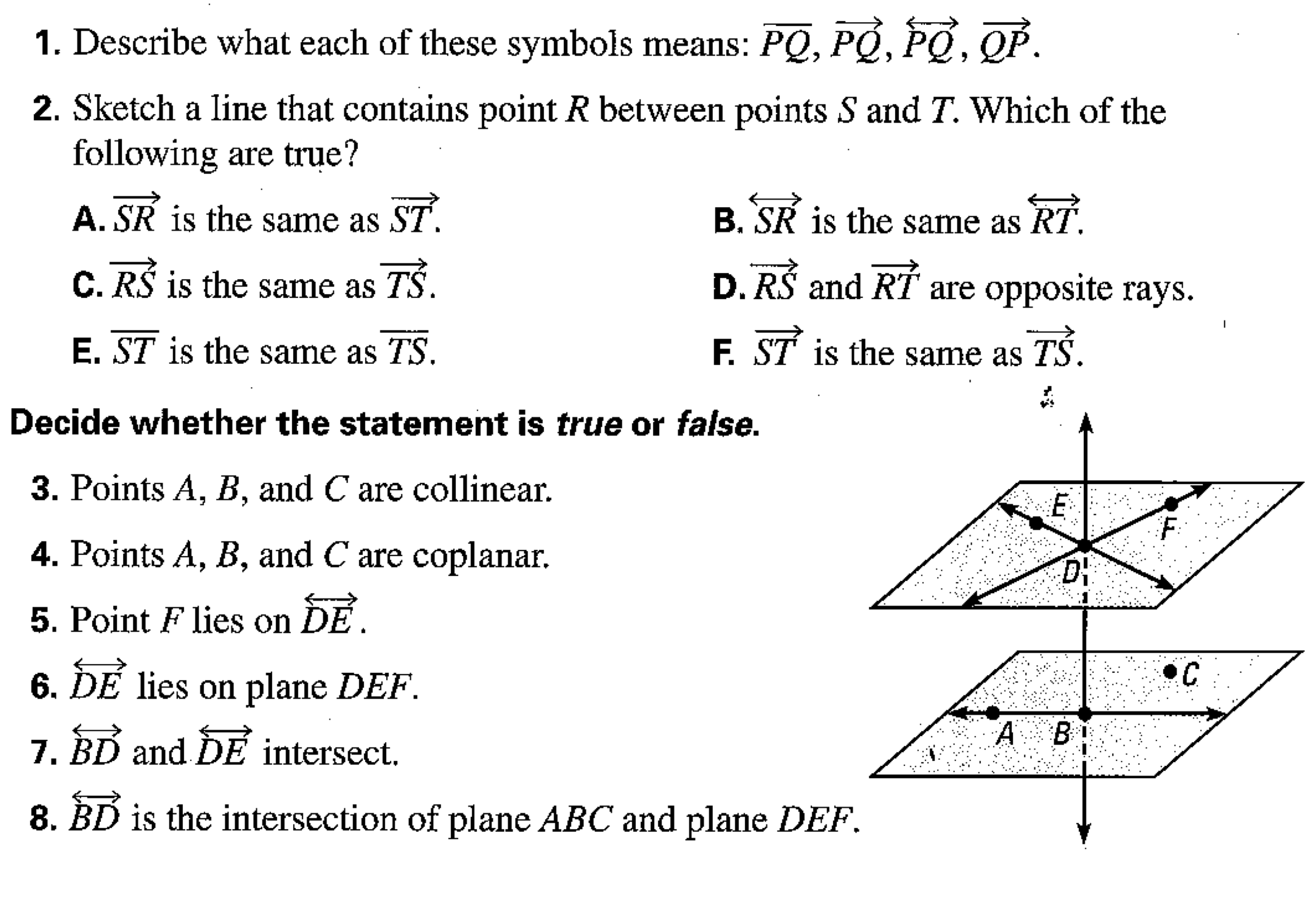
Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**FINAL REVIEW**: **Topic 1 – Basic Geometry Vocabulary**



**FINAL REVIEW**: **Topic 2 – Angles**

|  |  |  |
| --- | --- | --- |
| What is an angle?    \*notice that each side is a RAY\* | How do you name an angle?    *∠1* can also be named *∠𝐴𝐵𝐷* or *∠𝐷𝐵𝐴*  *∠2* can also be named *∠𝐷𝐵𝐶* or *∠𝐶𝐵𝐷*  **\*notice that the VERTEX is always the letter in the middle\*** | |
| How can you describe an angle? | | |
| Angle relationships | | Congruent Angles  Congruent angles have the same angle measure.  because the measure of both angles is 48o. |
| Parallel Lines cut by a Transversal  In the diagram to the left, line *l* and line *k* are parallel. Line *t* is a transversal because it cuts through both lines.  **Key Points:**  1. Vertical angles are congruent.  Ex: and  2. Alternate interior angles are congruent.  Ex: 6 and 4  3. Corresponding angles are congruent.  Ex: 5 and 4 | | |

**FINAL REVIEW**: **Topic 2 – Angles**



Using the diagram above and given that line *m* is parallel to line *n:*

1. Name a pair of alternate interior angles.
2. Name a pair of corresponding angles.
3. Name a pair of vertical angles.
4. If o, what is the measure of ? How do you know?
5. If o, what is the measure of ? How do you know?
6. Are lines *p* and *q* parallel? Explain why or why not.

6. Using the diagram below, name three angles with the vertex V.





8.



9.

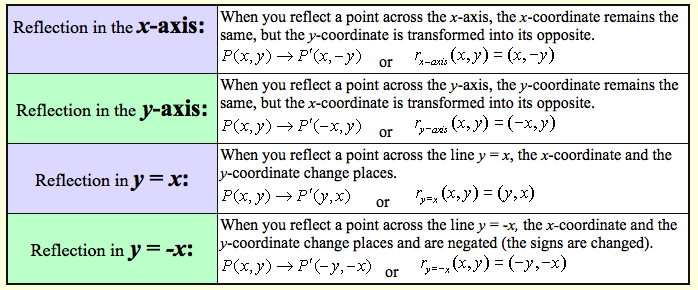




**Topic 3: Transformations**

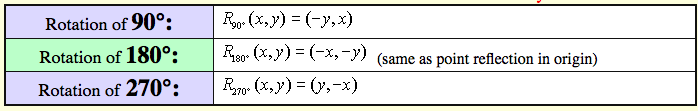
REFLECTION – 1. a FLIP across an axis of symmetry

2. CONGRUENCE TRANSFORMATION



ROTATION: 1. A rotation turns a figure through an angle about a fixed point called the center.

2. CONGRUENCE TRANSFORMATION



TRANSLATION: 1. A translation "slides" an object a fixed distance in a given direction.

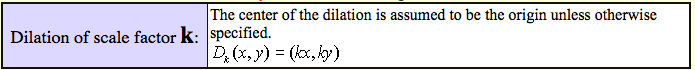
2. CONGRUENCE TRANSFORMATION



DILATION: 1. A dilation is a transformation that produces an image that is the same shape as the original, but is a different size.

2. SIMILARITY TRANSFORMATION

3. **NOTE: All dilations on the final exam will be from a center of (0, 0)**



|  |  |  |
| --- | --- | --- |
| Reflection in the y-axis: | Reflection in the *x*-axis: | Reflection in y = x: |
| Rotation:  Counter-Clockwise 90-degrees | Dilation (center is (0, 0): | Translation: |

#1



1. A. Reflect the figure across the y-axis. Name the image *A’B’C’D’*.
2. B. Does the image have the same side lengths and angle measurements? Justify your answer.
3. C. If the figure was reflected across the *x*-axis, then translated two units upward, would the result be the same as the transformation in part a? If not, show were the image would be on the coordinate plane and label it *A’’B’’C’’D’’*.

#2



If the pre-image point is (-3,5), write the coordinates of the image point after it undergoes the following transformations:

1. Reflected across the *x*-axis
2. Reflected across the *y*-axis
3. Translated seven units to the right and two units downward [(*x*+7, *y*-2)]
4. Rotated counter-clockwise 90 degrees about the origin.
5. Rotated 180 degrees about the origin.

#3

